

## **Abstract**

The present invention relates to an optimized interaction method of a WLAN user terminal selecting an access mobile communication network. In this method, after a wireless connection between the WLAN user terminal and a WLAN access network is established, the WLAN access network or the WLAN user terminal initiates an access authentication procedure, and the WLAN access network sends a user identity request message to the WLAN user terminal. After receiving the user identity request message, the WLAN user terminal determines network selection information to be currently carried according to a detecting result of whether the WLAN access network is changed or according to user selection information, and returning a message containing the determined network selection information to the WLAN access network. The WLAN access network then judges whether the network selection information in the received message indicates one of the mobile communication operation networks to which the WLAN access network is currently connected; if so, sends an access authentication request from the WLAN user terminal to a mobile communication operation network indicated in the network selection information, otherwise, the network sends a notification signaling to the WLAN user terminal, the WLAN user terminal completes subsequent operations according to contents in the notification signaling. With the present invention, when being accessed to a WLAN that is connected to multiple mobile communication operation networks, the WLAN user terminal is capable of selecting an optimal mobile communication operation network to access according to the requirements.